



## Anti Pregnancy associated plasma protein A (human, PAPP-A) Mouse monoclonal antibody

Subclass: IgG2b/k

PRODUCT NO.	<b>BTE 004-09</b>
PRESENTATION	Preparation: Protein-A/G purified Content: Available in 200 µL and 1 mL, 1 mg/mL Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl and 15 mM sodium azide Storage: In the dark at 4-8°C
ANTIGEN	Pregnancy-associated plasma protein-A (PAPP-A, Insulin-like growth factor binding protein-4 protease, PAPP-A-proMBP complex) is a large heterotetrameric glycoprotein of approximately 500 kDa, which was first discovered in serum from pregnant women. The heterotetramer consists of two PAPP-A subunits and two proMBP subunits. Low maternal serum levels of PAPP-A in first trimester biochemical screening is used as a marker of Down's syndrome (trisomy 21).
IMMUNOGEN	Purified human PAPP-A
SPECIFICITY	BTE 004-09 is specific for native human PAPP-A. Heat and SDS denatured PAPP-A is also recognized, but not acid treated PAPP-A.
EPITOPE SPECIFICITY	The epitope of BTE 004-09 is different from ABS 006-01 and ABS 006-24. The epitope is located on the PAPP-A subunit of the heterotetramer.
REACTIVITY	In sandwich ELISA the optimal combination is BTE 004-09 used as coating antibody and biotinylated ABS 006-24 used as detection antibody. BTE 004-09 can also be used as detection antibody in sandwich ELISA in combination with a polyclonal antibody towards PAPP-A in coat. BTE 004-09 detect both reduced and unreduced PAPP-A in Western Blotting, though reaction to unreduced is less than that of ABS 006-01 and ABS 006-24.
CULTURE MEDIUM	RPMI 1640 with 10% fetal calf serum
FUSION PARTNER	
IMMUNIZATION	BALB/c mice immunized i.p.
APPLICATION	

Method	Usability	Dilution guideline	References
ELISA	Yes	1:8000	
Immunoblotting	Yes		
Immunohistochemistry	Yes		

The dilution guideline for ELISA is based on sandwich ELISA in combination with a polyclonal antibody against the antigen. Users should determine the optimal dilutions for their own purpose.

REFERENCES	<ol style="list-style-type: none"> <li>Folkersen J, Grudzinskas JG, Hindersson P, Teisner B, Westergaard JG (1981) Purification of pregnancy-associated plasma protein-A by a two step affinity chromatographic procedure. <i>Placenta</i> 2:11-17.</li> <li>Sinosich MJ, Teisner B, Folkersen J, Saunders DM, Grudzinskas JG (1982) Radioimmunoassay for pregnancy-associated plasma protein A. <i>Clin Chem</i> 28:50-53.</li> <li>Chemnitz J, Folkersen J, Teisner B, Sinosich MJ, Tornehave D, Westergaard JG, Bolton AE, Grudzinskas JG (1986) Comparison of different antibody preparations against pregnancy-associated plasma protein-A (PAPP-A) for use in localization and immunoassay studies. <i>Br J Obstet Gynaecol</i> 93:916-923.</li> <li>Sinosich MJ, Sim RB, Teisner B (1990) Characterization of pregnancy-associated plasma protein-A: comparison with alpha 2-macroglobulin. <i>Biochem Int</i> 20:579-589.</li> <li>Macintosh MC, Iles R, Teisner B, Sharma K, Chard T, Grudzinskas JG, Ward RH, Muller F (1994) Maternal serum human chorionic gonadotrophin and pregnancy-associated plasma protein A, markers for fetal Down syndrome at 8-14 weeks. <i>Prenat Diagn</i> 14:203-208.</li> <li>Casals E, Fortuny A, Grudzinskas JG, Suzuki Y, Teisner B, Comas C, Sanllehy C, Ojuel J, Borrell A, Soler A, Ballesta AM (1996) First-trimester biochemical screening for Down syndrome with the use of PAPP-A, AFP, and beta-hCG. <i>Prenat Diagn</i> 16:405-410.</li> </ol>
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### CONDITIONS

All products are supplied on the understanding that they are for in vitro use only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.